

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Proposed Changes in the Commission's)	
Rules Regarding Human Exposure to)	ET Docket No. 03-137
Radiofrequency Electromagnetic Fields)	

To: The Commission

**REPLY COMMENTS OF
SOUTHERN COMMUNICATIONS SERVICES, INC.
AND SOUTHERN COMPANY SERVICES, INC.**

Pursuant to Section 1.415 of the FCC's Rules, Southern Communications Services, Inc. d/b/a Southern LINC, and Southern Company Services, Inc (collectively referred to herein as "Southern") hereby submit their Reply to certain of the Comments filed in response to the Commission's *Notice of Proposed Rule Making*, FCC 03-132 ("*NPRM*") in the above-captioned matter. In this proceeding the FCC has proposed changes to the Commission's Rules on human exposure to radiofrequency electromagnetic fields.¹

I. Introduction

In its initial Comments in this proceeding, Southern expressed its support for the Commission's goal of providing more efficient, practical and consistent application of the procedures to be used by licensees in demonstrating compliance with the Commission's Rules on radiofrequency (RF) exposure. However, Southern requested clarification of a

¹ The *NPRM* was published in the Federal Register on September 8, 2003, 68 Fed. Reg. 52879

few of the specific proposals in the NPRM; namely, categorical exclusion of low power fixed devices such as Multiple Access Systems (MAS) operating under Part 101, bi-directional amplifiers authorized under Section 90.219, and “leaky” cable systems used to extend in-building coverage of commercial mobile service. Southern also encouraged the Commission to adopt a transition period for complying with the new Rules that is commensurate with the burdens that would be created by any Rule changes in this proceeding.

A number of other commenters raised similar recommendations. Southern also takes this opportunity to address some additional issues raised by other parties in their initial comments.

II. Discussion

A. The Commission Should Correct Table 1 of the Proposed Rules on Part 101 Services Subject to Routine Evaluation

The American Petroleum Institute (API) and the National Association of Broadcasters (NAB) joined Southern in pointing out that Table 1 to Section 1.1310 of the proposed Rules should be corrected to reflect the actual proposal in the text of the *NPRM*. That is, Table 1, on the categorical exclusion of Part 101 transmitters, should be revised to specify that of the Part 101 services only the Local Multipoint Distribution Service (LMDS), Digital Electronic Message Service (DEMS), and the 24 GHz Service are subject to the new rules on routine environmental evaluations. All other Part 101 services, including the Multiple Address Service (MAS), should remain categorically excluded from routine environmental evaluation. Southern therefore renews its request that Table 1 to Section 1.1310 be revised to conform with the specific proposal in the *NPRM*.

B. The FCC Should Relax the Power Limits for Indoor “Micro” Base Stations Entitled to Categorical Exclusion

In its Comments, Southern recommended that the Commission clarify that bi-directional amplifiers authorized under Section 90.219 and “leaky cable” systems used to extend coverage within an enclosed structure are categorically excluded. Similar comments were filed by Cingular Wireless LLC, which notes that antennas used with micro base stations located in office buildings, shopping malls, and other public areas should not require a survey to insure compliance.² Cingular notes that these antennas are generally mounted in or above ceiling tiles and are generally 2 feet or more above the head of a six-foot adult. Based on its calculations, Cingular recommends that the default power limits for “micro” base stations be set at 8 watts ERP for frequencies below 1.5 GHz, and 26 watts ERP for frequencies above 1.5 GHz, based on a separation distance of 2 feet (60 cm) in front of the antenna.³ Southern concurs with Cingular’s recommendation and urges the Commission to adopt these reasonable limits for indoor “micro” base stations.

C. Any Transition Period Should Be Commensurate With the Burdens That Would Be Created by the Rule Changes

A number of parties questioned whether a six month transition period would be adequate given the potentially large number of devices that might have to be evaluated for environmental compliance if they are no longer subject to categorical exclusion.⁴ Southern concurs with Sprint’s recommendation that the Commission should grandfather existing antenna placements rather than requiring such facilities to go through routine

² Comments of Cingular Wireless LLC, at 12.

³ *Id.*, at 13.

⁴ See, e.g., Comments filed by Motorola at 15, the Cellular Telecommunications and Internet Association (CTIA) at 13-14, Sprint Corporation at 3-4, T-Mobile at 14, Winstar at 2-3, and Cingular at 15-16.

evaluations within six months or some other date certain based upon whatever new categorical exclusion rules the Commission might adopt in this proceeding.

With potentially thousands of existing antennas falling outside the revised rules for categorical exclusion, a significant proportion of existing rooftop antenna sites could be subject to review and routine evaluation. Noting that this would be an immense burden for licensees, Sprint correctly suggests that routine evaluation of existing sites should not be imposed “absent clear and convincing evidence that the existing standard has resulted in antenna installations that pose an unmitigated and unacceptable risk of non-compliance with the Commission’s RF exposure guidelines.”⁵ Southern agrees, and further notes that the current rulemaking was initiated to *facilitate* the process for demonstrating compliance, not to create new burdens on the licensees of facilities that are already deemed to be compliant with the Commission’s standards.

D. Separation Distances Should Be Based on Distances to the Main Beam of the Antenna

In the *NPRM*, the Commission suggested that routine evaluation under its proposals would only consist of what is necessary to verify that the RF guidelines will not be exceeded.⁶ It cites, as an example, that where a directional antenna is publicly accessible within 10 meters only from outside the main beam of the antenna, routine evaluation could consist of no more than verification of this fact. In the alternative, the Commission asked whether the rule should be written in a manner that categorically excludes antennas that are publicly accessible within the specified distances only outside the main beam.

⁵ Comments of Sprint at 4.

⁶ *NPRM* at para. 16.

Southern joins a number of commenters who recommend that the Commission adopt its alternative approach of clarifying that the categorical exclusion should apply based on the distance from the public to the main beam of the antenna. As pointed out by Sprint, RF exposure is likely to be significantly lower outside the main beam of the antenna, and directional antennas installed right at the edge of a rooftop with the beam directed away from the building will have RF exposure limited to whatever RF fields are present at the side-lobes and back-lobes of the antenna.⁷

Similarly, T-Mobile notes that it makes little sense to treat directional antennas as if these antennas were omnidirectional.⁸ T-Mobile further suggests that publicly accessible spaces separated from a transmitter by a brick wall or a rooftop do not require the same distance-separation protection as do open spaces in front of the antenna. Although T-Mobile would apply these factors during the “routine evaluation,” Southern encourages the Commission to adopt rules such that the distance separations for categorical exclusion are based on distances to the main beam of a directional antenna.

E. A “Sliding Scale” of Power and Separation Distances Would Help Simplify the Process for Determining Categorical Exclusions

Southern agrees with Cisco Systems, Inc. that refinements can be made to the Commission’s proposals for categorical exclusions that would better reflect real potential for exposure to excessive RF emissions. Although Southern does not necessarily agree with the specific power/distance thresholds suggested by Cisco, Southern does agree with Cisco’s recommendation that the Commission adopt a “sliding scale” based on power and separation distance instead of the broad categories of powers and distances as proposed in

⁷ Comments of Sprint at 2.

⁸ Comments of T-Mobile at 10.

the *NPRM*. This approach would facilitate deployment of many types of devices that fall between the power and separation distance extremes proposed in the *NPRM*.

F. Worker Training Should Be Appropriate to the Situation and Not Based on Inflexible Requirements

The Commission's Rules provide for two tiers of exposure limits: the "general population/uncontrolled" and "occupational/controlled." The higher "occupational/controlled" limits may be used in situations where persons are exposed as a consequence of their employment, are "fully aware" of the potential exposure and can "exercise control" over their exposure. These limits can also be applied in situations in which persons are "transient" through the area and are "made aware" of the potential for exposure.⁹ The Commission has proposed to include guidance in the Rules that the term, "fully aware," means the worker has received "written and verbal information" concerning the potential for RF exposure and has received "comprehensive training" regarding appropriate work practices.¹⁰

As an initial matter, Southern joins a number of parties who recommend that the proposed requirement for "written and verbal information" should be clarified as requiring "written or oral" information. Sprint notes that there is no rationale for requiring licensees to provide both written and oral information to workers on RF exposure when either method would achieve the purpose.¹¹ Similarly, CTIA notes that even though the proposed rules would require both written and verbal information

⁹ 47 C.F.R. §1.1310 Table 1 Note 1.

¹⁰ *NPRM* at para. 38.

¹¹ Comments of Sprint at 3.

regarding RF exposure, the proposed rules do not address the nature of the presentation that is to be given workers on appropriate work practices to control RF exposure.¹²

Southern agrees with Motorola that instead of three separate “layers” of information that should be provided (written information, verbal information, and comprehensive training), the Rules should set a single performance-based requirement for “adequate training.”¹³ A licensee should have flexibility to use the type of training best suited to its operations and workforce, and should only be required to provide for retraining as needed; *e.g.*, if positions change or there are significant changes in the types of RF environments to which its workers will be exposed. Southern disagrees with the implication in the comments of the National Association of Broadcasters (NAB) that the FCC should set specific requirements on matters such as the amount information that must be conveyed, the frequency of training, and recordkeeping of employee training.¹⁴ Such specificity could create standards that do not account for the variable nature of a licensee’s facilities, the relative competence of its workforce relating to RF and safety matters generally, and the size of the licensee’s workforce. There is simply no evidence in the record that worker training has been a major problem for which the FCC must provide more specific requirements.¹⁵

Southern agrees with the NAB that the Commission should provide further clarification of a licensee’s requirements with respect to persons who are “transient” through an area that is subject to the occupational/controlled exposure limits. The

¹² Comments of CTIA at 13.

¹³ Comments of Motorola at 13.

¹⁴ Comments of the National Association of Broadcasters at 2-3.

¹⁵ The Commission is not particularly well-suited to adopting specific workplace safety rules. Other agencies (*e.g.*, the Occupational Safety and Health Administration) already have programs in place to ensure worker safety.

Commission has proposed that such persons “must receive written or verbal information and notification (for example, warning signs)” concerning their exposure potential and appropriate means to mitigate their exposure.¹⁶ Southern agrees with the Commission’s proposal that such persons should be made “aware” (as opposed to “fully aware”), owing to the inherent difficulties associated with communicating information to individuals who may be totally unknown to the licensee and who may not be subject to any kind of control by the licensee.

Hammett and Edison, Inc. notes that it is “impractical to the point of being impossible” for an FCC licensee at a multitenant rooftop site to have advance notice of access by workers (*e.g.*, roofing contractors or HVAC technicians) to areas near its antennas. As further pointed out by Pinnacle Telecom Group, probably the most effective form of communication to transient individuals is the posting of suitable RF alert signs.¹⁷ Southern also agrees with Pinnacle, however, that the Commission should discourage (or at least not *encourage*) the indiscriminate posting of signs at all antenna sites due to the potential effect of “diluting” the significance that should be paid to such signs.¹⁸

G. Responsibilities of Licensees at Multiple Tenant Sites Should Be Clarified

T-Mobile recommends that the Commission further clarify the responsibilities among licensees in a multiple tenant environment.¹⁹ T-Mobile notes that except for setting a 5% threshold for determining which carriers must share responsibility for RF compliance, the Commission has not indicated how licensees should allocate

¹⁶ *NPRM* at Appendix A; proposed revisions to 47 C.F.R. §1.1310 Table 1 Note 1.

¹⁷ Comments of Pinnacle Telecom Group at 5.

¹⁸ *Id.* at 6-7.

¹⁹ Comments of T-Mobile at 16-17.

responsibility among themselves, leading to confusion on the part of carriers with facilities in such environments.

Southern agrees with T-Mobile's assessment, as well as its specific recommendation that the Commission adopt a policy that imposes on a newcomer to a multiple tenant environment the primary responsibility for ensuring that the addition of new transmitters will not result in a cumulative RF effect that would exceed the appropriate limits. Existing licensees would have a responsibility to cooperate with the newcomer in resolving RF issues, but would have only secondary responsibility to ensure compliance when new transmitters are added to the environment. Southern agrees that such a policy would at least put the burden on one licensee to take the initiative in ensuring compliance instead of the current situation in which everyone, but no one in particular, is responsible. It would also conform to the Commission's long-standing policy of placing burdens on the newcomer to avoid taking actions that would adversely affect earlier licensees at a site.

As a further corollary to T-Mobile's recommendation, Southern would suggest that the Rules also impose a primary responsibility for verifying compliance on an existing tenant at a site who makes significant changes to its facilities that could increase the potential for the site to become out of compliance (*e.g.*, by adding transmitters, changing antennas or antenna heights, or increasing power). In these situations, the existing tenant is not a "newcomer," but it would seem appropriate to impose the primary responsibility on a tenant making such changes to coordinate any compliance efforts at the site that may be triggered by its modification of facilities.

At many multiple tenant sites, it can be difficult to even identify all potential contributors, particularly if the site owner or manager is unwilling to disclose the identities of all of the site tenants. Without some means of coordination among tenants, each tenant could be faced with the task of conducting a site survey and no easy means of sharing responsibility for bringing the site into compliance. Southern therefore recommends that the Commission urge site lessors and managers to provide a mechanism by which lessees may be able to exchange relevant information regarding site compliance.

III. Conclusion

Southern appreciates the FCC's taking the initiative to further clarify the procedures for determining compliance with the Commission's rules on RF exposure. Southern believes that a number of modifications and clarifications can be made that would significantly reduce the burdens on licensees while still ensuring that workers and members of the general public are adequately protected. Southern recommends that the categorical exclusion of most Part 101 services be reinstated in the rules; that the power limits for low power devices be relaxed, particularly for indoor "micro" base stations; that separation distances be based on distance to the main beam of the antenna; that a "sliding scale" of powers and distances be used to determine categorical exclusions; that any requirement for worker training be flexible, taking into consideration the differences among licensees and workers; that any transition periods be commensurate with the burdens that would be created by the rule changes; and that the responsibilities of tenants at a multiple tenant site be further clarified.

WHEREFORE, THE PREMISES CONSIDERED, Southern Communications Services, Inc. and Southern Company Services, Inc. respectfully request the Commission to consider these Reply Comments and proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

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and Southern Company Services, Inc.

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Dated: January 6, 2004